Interactive Training Tool (ITT) and the MIL-STD-2525A Validation Test

31 October 1996

ITT and the MIL-STD-2525A Validation Test

- *Automated testing will be performed using standard tactical hardware (i.e., SunSparc or HP workstations)*
  - ITT supports a number of SUN workstation platforms
  - Port of ITT software is required for HP workstations
- *Test will use operational software that has been instrumented for performance recording*
  - ITT always does performance recording
- *A description of the task (e.g., select all hostile air tracks) will be displayed on the workstation monitor*
  - ITT can accomplish this via annotations on the image being displayed or as a voice-over at the time the image is being loaded

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- *The operator will click on a Start button to present a set of symbols displayed on a map background and start the clock. The operator will select symbols that match the task and then click a Done button when finished to stop the clock*
  - ITT Version 3.1 includes a begin test *Acknowledge* button that starts a timer and a *Done* button to indicate completion
  - Elapsed time and number of errors per test can then be printed or reviewed
  - Timer countdown and forced end of test could be implemented to simulate time stress during the test
- *The symbology will be presented on a tactical display representative of what the operator would encounter in a joint environment*
  - No ITT software modifications required

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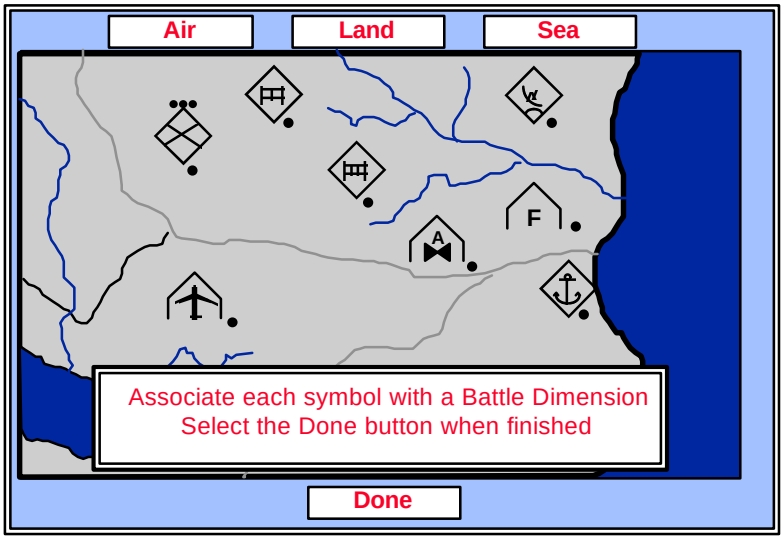
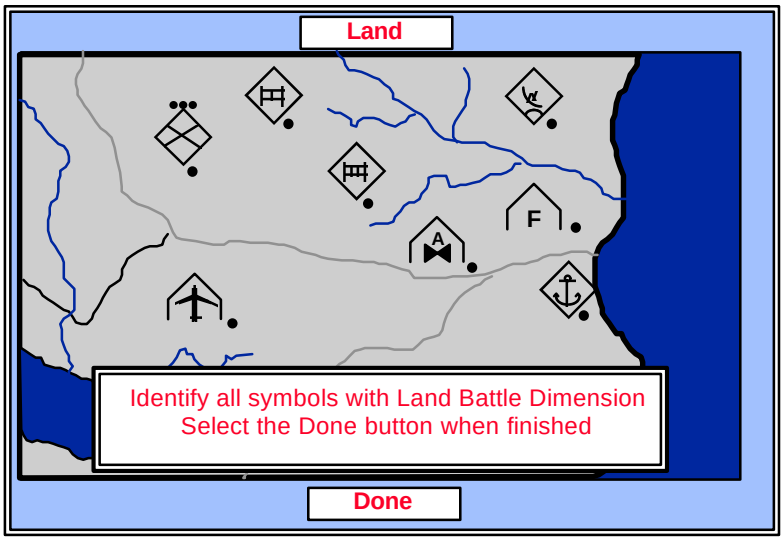
- *A number of map products will be selected to represent the range of backgrounds upon which the new symbology will likely be displayed*
  - Requires a substantial change to ITT software
  - The supported color set for annotations must be expanded from the current 16 colors to 32-48 colors to support ADRG map displays

ITT Test Screen Example 1



ITT Test Screen Example 2



Proposed Schedule

Months 0-2:

- Design, Code, and Test modifications to ITT V3.1 as needed to support Map Product Display, and install at the test development site

Months 3-4:

- Prepare detailed test plan, get government review and concurrence with test validity

Months 5-10:

- Govt. acquires imagery and map products for test and overlays these products with test symbol graphics
- ITT personnel incorporates Govt. provided imagery and maps (with overlays) into ITT

Proposed Schedule
(Continued)

Month 11:

- Perform ITT Quality Assurance and Final Review procedures of completed test
- Deliver test and revised ITT software to government for acceptance

Month 12:

- Support Government during testing

Rough Labor Estimate

Projected Labor for Software Development/Modification:

ITT port to HP platform .....11 man weeks
Additional colors for map display..... 4 man weeks
Countdown timer to simulate time stress ....1 man week
Software support to test developers ..... 4 man weeks
Total ..... 20 man weeks

Projected Labor for Test Development:

Course developer ..... 3 man weeks
Data Production ..... 4 man weeks
Quality Assurance ..... 2 man weeks
Management ..... 6 man weeks
Total ..... 15 man weeks

Total projected labor for the required tasks is 35 man weeks.

Rough Cost Estimate

- A rough cost estimate for the 35 man weeks of labor is $120K
- This estimate is based on the following assumptions:
  - Govt. will provide overlaid maps and images for test
  - 80 to 100 frames of map or imagery data are adequate to administer the test
  - ITT specialists will assist with generation of the test
  - ITT personnel will play a minimal role in administering the test (i.e., will be on hand to make sure the test runs smoothly)
  - All modifications to ITT source code will be made by ITT contractor personnel